

**ABSTRACT**

A capillary pump is provided for producing pressurized and unpressurized vapor emissions from liquid feed. In its simplest form, the capillary pump incorporates a liquid feed intake, a porous vaporization component, and a heat transfer component. Additional components, such as an insulator component, a feed pre-heat component, a liquid feed reservoir and/or delivery system, an integrated or associated heater component, a vapor collection chamber, a heat distribution component, an orifice component and/or vapor release component, may also be associated with or integrated in the improved capillary pumps. Capillary pump arrays are provided, and numerous applications for capillary pumps are disclosed.